REMARKS

The Examiner has rejected claims 20 and 27 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

In response thereto, claims 20 and 27 have been amended as recommended by the Examiner in order to overcome this rejection. The Examiner's careful reading is appreciated.

Claims 19-21, 23, 24, and 27-29 have been rejected by the Examiner under 35 USC 103(a) as being unpatentable over U.S. 6,576,330 to Schenck, et al.

In this rejection, the Examiner acknowledges that the reference does not teach that Boron Nitride (BN) is "fine-particle" or that the aluminum oxide is in the nanometer range, and takes the position that the particle size of the aluminum hydroxide is a result-effective variable affecting properties of the paint such as viscosity and flowability. Consequently, the Examiner considers that it would have been obvious to one skilled in the field of the art to optimize such a result-effective variable by routine experimentation.

The Applicants submit that the particle size of the inorganic binder does not constitute a variable which could have been optimize by routine experimentation. Rather, the size range of the inorganic binder particles is an absolute prerequisite in order to carry out the invention.

Stable layers at burn-in temperatures as low as 400° C will be obtained only if the size of the binder particles allows sintering at this temperature. Accordingly, only a nano scale binder enables sufficient solidification at low temperatures.

Therefore, the oxide particle size is not only important as far as viscosity flowability and stability of the suspension, but it is crucial for the solidification of the layer.

For example, using nano scale ZrO_2 particles solidification can be obtained at 1000° C whereas utilizing micro-scale ZrO_2 solidification occurs only at the 1600° C, as set forth in the last paragraph of Example 2 in the original specification.

It should be pointed out that in Schenck, et al. layers having poor cohesion are achieved if Boron Nitride and Aluminum Oxide are used exclusively, see column 5, line 46. This is probably due to the insufficient sintering activity of the non-nano scale particles used in the process. This problem is solved by using fiber-type particle shapes amenable to achieve particularly wide layers.

Accordingly, the Applicants submit that particle size of the aluminum hydroxide is not solely a result-effective variable effective properties of the paint such as viscosity and flowability. Therefore, the Applicants submit that the Examiner has not made a prima facie case of

obviousness under 35 USC 103(a) on the basis of the Schenck reference.

The same arguments apply to claims 20-21, 23, 25, and 27-29.

In view of the Examiner's indication that claim 25 would be allowable if it incorporated the limitation of the base and intervening claims, claim 25 has been amended to place it independent form utilizing the features of claim 19 from which it depends.

In view of the arguments hereinabove set forth and amendment to the claims, it is submitted that each of the claims now in the application define patentable subject matter not anticipated by the art of record and not obvious to one skilled in this field who is aware of the references of record. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

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